**ErpCrebit Internal APIs for various Payment Gateways**

# 1. Web Service Specification

## 1.1 Make Payment

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| **API Url** | <http://xxx.erpcrebit.com/Json/PaymentGateway/MakePayment?tokenId=yyy> |
| **Method** | POST |

Where xxx - Any valid Client name of ErpCrebit,

 yyy - Token of valid Erpcrebit user

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| **Request Headers** |
| Content-Type | application/json |

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| **Request Parameters** |
| **Name** | **Description** | **Type** | **Mandatory** |
| DebitAccountFK | Refers to EntryID of table CustomerBankAccount which specifies the account from which you want to debit the money. | Integer | yes |
| PaymentGatewayFK | Refers to EntryID of table PaymentGateway which specified the payment gateway you want to choose to pay with. | Integer | no |
| BatchReference | Unique Reference of current payment batch. | String | yes |
| PaymentRecords | Array of Payment Records | Array | yes |

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| **PaymentRecords Parameters** |
| **Name** | **Description** | **Type** | **Mandatory** |
| CreditAccountFK | Refers to EntryID of table CustomerBankAccount which specifies the account into which you want to credit the money. | Integer | yes |
| Amount | Amount to be credited | Decimal | yes |
| Narration | Description of the transaction | String | yes |
| TransactionReference | Unique Reference of current payment record i.e. current transaction. | String | yes |

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| **Sample Request (Nibss)** |
| { "DebitAccountFK": 5, "PaymentGatewayFK": 2, "BatchReference": "1514360608", "PaymentRecords": [ { "CreditAccountFK": 7, "Amount": 100, "Narration": "test tran1", "TransactionReference": "TRef1" }, { "CreditAccountFK": 129, "Amount": 110, "Narration": "test tran2", "TransactionReference": "TRef2" } ]} |

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| **Sample Response (Nibss)** |
| { "success": true, "paymentGatewayFK": 2, "data": { "Header": { "Status": "16", "StatusMessage": "REQUEST ACCEPTED", }, "ResponseStatus": [] }} |

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| **Sample Request (Gtb)** |
| { "DebitAccountFK": 1, "PaymentGatewayFK": 4, "BatchReference": "1514294428", "PaymentRecords": [ { "CreditAccountFK": 2, "Amount": 100, "Narration": "test trans1", "TransactionReference": "abc1" }, { "CreditAccountFK": 5, "Amount": 110, "Narration": "test trans2", "TransactionReference": "abc2" } ]} |

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| **Sample Response (Gtb)** |
| { "success": true, "paymentGatewayFK": 4, "data": { "ResCode": "1000", "Message": "File Uploaded Successfully", "Errors": [], "ValidateTokenResponse": null }} |

### Various Payment Gateways’ Response Codes

* **Nibss**

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| --- | --- |
| **Response Code** | **Response Description** |
| 00 | SUCCESSFUL  |
| 01 | DUPLICATE UPLOAD |
| 02 | MANDATORY FIELD NOT SET |
| 03 | UNKNOWN CLIENT ID |
| 04 | UNKNOWN UNIQUE ID |
| 05 | FORMAT ERROR |
| 06 | IN PROGRESS |
| 07 | UNKNOWN DEBIT ACCOUNT |
| 99 | SYSTEM ERROR |
| 08 | FAILED NAME VALIDATION |
| 09 | REJECTED BY APPROVER |
| 10 | INVALID NUBAN NUMBER |
| 11 | PAYMENT DISHONOURED BY BANK |
| 12 | PROCESSING COMPLETED WITH ERROR |
| 13 | DEBIT ACCOUNT NOT FOUND |
| 14 | RECORD NOT FOUND |
| 15 | PAYMENT FAILED |
| 16 | REQUEST ACCEPTED |
| 17 | PAYMENT SCHEDULE NOT FOUND |
| 18 | INVALID SCHEDULE ID |
| 19 | BENEFICIARY BANK NOT AVAILABLE |
| 20 | DO NOT HONOR |
| 21 | DORMANT ACCOUNT |
| 22 | INVALID BANK CODE |
| 23 | INVALID BANK ACCOUNT |
| 24 | CANNOT VERIFY ACCOUNT |

* **Gtb**

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| **Response Code** | **Response Description** | **Resolution** |
| 1000 | File Uploaded Successfully | - |
| 1001 | Invalid Username / Password | Reset password on GAPS portal |
| 1002 | Access disabled or not activated | Contact your account officer |
| 1003 | Access to the system is locked | Reset password on GAPS portal |
| 1004 | Password expired | Reset password on GAPS portal |
| 1005 | Invalid file type | Ensure file extension is .txt |
| 1006 | File size exceeds allowed upload limit (1mb) | check file size and ensure it does not exceed 1mb |
| 1007 | File upload error | Format not correct, use profiled format |
| 1008 | File upload error unable to process file | Format not correct, use profiled format |

### Bank Codes/ Sort Codes

* List of 3 digit Bank Codes which can be used to identify the bank

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| **Bank Name** | **Bank Code** |
| ACCESS BANK PLC | 044 |
| MAIN STREET BANK NIGERIA PLC | 014 |
| KEYSTONE BANK PLC | 082 |
| DIAMOND BANK PLC | 063 |
| ECOBANK NIGERIA PLC | 050 |
| FIDELITY BANK PLC | 070 |
| FIRST BANK OF NIGERIA PLC | 011 |
| FIRST CITY MONUMENT BANK PLC | 214 |
| GUARANTY TRUST BANK PLC | 058 |
| STANBIC IBTC BANK PLC | 221 |
| CITI BANK | 023 |
| SKYE BANK PLC | 076 |
| ENTERPRISE BANK PLC | 084 |
| STANDARD CHARTERED BANK PLC  | 068 |
| STERLING BANK PLC | 232 |
| UNION BANK OF NIGERIA PLC | 032 |
| UNITED BANK FOR AFRICA PLC | 033 |
| UNITY BANK PLC | 215 |
| WEMA BANK PLC | 035 |
| ZENITH INTERNATIONAL BANK PLC | 057 |
| HERITAGE BANK | 030 |
| JAIZ BANK | 301 |

* List of 9 digit Bank Codes which are used to identify bank branch.

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| **Bank Name** | **Bank Branch Code** |
| ACCESS BANK PLC | 044150149 |
| MAIN STREET BANK NIGERIA PLC | 014150030 |
| KEYSTONE BANK PLC | 082150017 |
| DIAMOND BANK PLC | 063150162 |
| ECOBANK NIGERIA PLC | 050150311 |
| FIDELITY BANK PLC | 070150003 |
| FIRST BANK OF NIGERIA PLC | 011152303 |
| FIRST CITY MONUMENT BANK PLC | 214150018 |
| GUARANTY TRUST BANK PLC | 058152052 |
| STANBIC IBTC BANK PLC | 221159522 |
| CITI BANK | 023150005 |
| SKYE BANK PLC | 076151006 |
| ENTERPRISE BANK PLC | 084150015 |
| STANDARD CHARTERED BANK PLC  | 068150057 |
| STERLING BANK PLC | 232150029 |
| UNION BANK OF NIGERIA PLC | 032156825 |
| UNITED BANK FOR AFRICA PLC | 033154282 |
| UNITY BANK PLC | 215082334 |
| WEMA BANK PLC | 035150103 |
| ZENITH INTERNATIONAL BANK PLC | 057150013 |
| HERITAGE BANK | 030159992 |
| JAIZ BANK | 301080020 |

* Note:
* First 3 digits in above 9 digit bank branch codes which are used to identify bank which are also listed in previous table.
* 3 digit Bank Code should be mapped to field CentralBankCode of table Bank and 9 digit Bank Branch Code should be mapped to field SortCode of table BankName.

## Get Payment Status

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| **API Url** | <http://xxx.erpcrebit.com/Json/PaymentGateway/GetPaymentStatus?tokenId=yyy> |
| **Method** | POST |

Where xxx - Any valid Client name of ErpCrebit,

 yyy - Token of valid Erpcrebit user

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| **Request Headers** |
| Content-Type | application/json |

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| **Request Parameters** |
| **Name** | **Description** | **Type** | **Mandatory** |
| PaymentGatewayFK | Refers to EntryID of table PaymentGateway which specified the payment gateway you want to choose to pay with. | Integer | yes |
| BatchReference | Unique Reference of current payment batch. | String | No, Yes (Nibss only) |
| TransactionReference | Unique Reference of current payment record i.e. current transaction. | String | No (Nibss Only)Yes |

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| **Sample Request (Nibss)** |
| { "PaymentGatewayFK": 2, "BatchReference": "AutoSweepSetup\_372\_14", "TransactionReference": null} |

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| **Sample Response (Nibss)** |
| { "success": true, "paymentGatewayFK": 2, "data": { "PaymentRecord": [ { "Status": "00", "ErrorReason": "Paid -28/12/2017 16:52 DA - 2000000 DR-10019189819 - 44891 -\n " } ], "Header": { "Status": "00", "StatusMessage": "SUCCESSFUL" }, "ResponseStatus": [ { "Status": "00", "ErrorReason": "Paid -28/12/2017 16:52 DA - 2000000 DR-10019189819 - 44891 -\n " } ] }} |

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| **Sample Request (Gtb)** |
| { "PaymentGatewayFK": 4, "BatchReference": null, "TransactionReference": “TRef”} |

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| **Sample Response (Gtb)** |
| { "success": true, "paymentGatewayFK": 4, "data": { "ResCode": "1001", "Message": " :Waiting to be processed", "Errors": [], "ValidateTokenResponse": null }} |

### Various Payment Gateways’ Response Codes

* **Nibss**

|  |  |
| --- | --- |
| **Response Code** | **Response Description** |
| 00 | SUCCESSFUL  |
| 01 | DUPLICATE UPLOAD |
| 02 | MANDATORY FIELD NOT SET |
| 03 | UNKNOWN CLIENT ID |
| 04 | UNKNOWN UNIQUE ID |
| 05 | FORMAT ERROR |
| 06 | IN PROGRESS |
| 07 | UNKNOWN DEBIT ACCOUNT |
| 99 | SYSTEM ERROR |
| 08 | FAILED NAME VALIDATION |
| 09 | REJECTED BY APPROVER |
| 10 | INVALID NUBAN NUMBER |
| 11 | PAYMENT DISHONOURED BY BANK |
| 12 | PROCESSING COMPLETED WITH ERROR |
| 13 | DEBIT ACCOUNT NOT FOUND |
| 14 | RECORD NOT FOUND |
| 15 | PAYMENT FAILED |
| 16 | REQUEST ACCEPTED |
| 17 | PAYMENT SCHEDULE NOT FOUND |
| 18 | INVALID SCHEDULE ID |
| 19 | BENEFICIARY BANK NOT AVAILABLE |
| 20 | DO NOT HONOR |
| 21 | DORMANT ACCOUNT |
| 22 | INVALID BANK CODE |
| 23 | INVALID BANK ACCOUNT |
| 24 | CANNOT VERIFY ACCOUNT |

* **Gtb**

|  |  |  |
| --- | --- | --- |
| **Response Code** | **Response Description** | **Resolution** |
| 1000 | Payment successful | - |
| 1001 | Waiting to be processed | Kindly wait for the transaction to be processed |
| 1002 | Transaction failed | Re-initiate transaction |
| 1003 | Waiting for approval | Kindly approve on the GAPS portal |
| 1004 | Password Expired | Reset password on GAPS portal |
| 1005 | Unable to process request | Cross check the search value |

## Add/Edit Customer Payment Gateway Credentials

* **Add Credentials**

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| **API Url** | <http://xxx.erpcrebit.com/Json/PaymentGateway/CreateCredentials?tokenId=yyy> |
| **Method** | POST |

Where xxx - Any valid Client name of ErpCrebit,

 yyy - Token of valid Erpcrebit user

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| **Request Headers** |
| Content-Type | application/json |

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| **Sample Request** |
| { "CustomerFK": 581669, "PaymentGatewayFK": 4, "PaymentGatewayApiFK": 1, "CustomerId": "205158352", "Username": "dapoapar", "Password": "abcd1234\*", "PaymentGatewayRoleFK": null, "PasswordNotes": ""} |

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| **Sample Response** |
| { "success": "true", "customerPaymentGatewayCredentials": [ { "entryID": "13", "customerFK": "581669", "paymentGatewayFK": "4", "paymentGatewayApiFK": "1", "customerId": "205158352", "userName": "dapoapar", "password": "uwSpAwj/EfRzgKl3uGwQ9Q==", "createdBy": "793", "createdOn": "2017-09-16T11:59:31", "updatedBy": "", "updatedOn": “”, "isDeleted": "false", "sysRowVersion": "4648065589720383488", "sysRef": "-1/MakePayment-4/GTBank-581669/-4940333/Manan Suthar-", "paymentGatewayRoleFK": "", "passwordNotes": "", "customer\_SysRef": "-4940333/Manan Suthar-", "customerPK": "581669", "paymentGateway\_PaymentGatewayName": "GTBank", "paymentGatewayPK": "4", "paymentGatewayApi\_ApiName": "MakePayment", "paymentGatewayApiPK": "1", "paymentGatewayRole\_RoleName": "", "paymentGatewayRolePK": "", "rowFwd": "1", "rowBwd": "1", "maxRows": "1" } ], "newUrlPath": "", "isPopup": "False"} |

* **Edit Credentials**

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| **API Url** | <http://xxx.erpcrebit.com/Json/PaymentGateway/EditCredentials?tokenId=yyy> |
| **Method** | POST |

Where xxx - Any valid Client name of ErpCrebit,

 yyy - Token of valid Erpcrebit user

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| **Request Headers** |
| Content-Type | application/json |

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| --- |
| **Sample Request** |
| { "EntryID": 13, "CustomerFK": 581669, "PaymentGatewayFK": 4, "PaymentGatewayApiFK": 1, "CustomerId": "205158352", "Username": "dapoapar", "Password": "abcd1234\*", "PaymentGatewayRoleFK": null, "PasswordNotes": ""} |

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| --- |
| **Sample Response** |
| { "success": "true", "customerPaymentGatewayCredentials": [ { "entryID": "13", "customerFK": "581669", "paymentGatewayFK": "4", "paymentGatewayApiFK": "1", "customerId": "205158352", "userName": "dapoapar", "password": "uwSpAwj/EfRzgKl3uGwQ9Q==", "createdBy": "793", "createdOn": "2017-09-16T11:59:31", "updatedBy": "793", "updatedOn": "2017-12-27T16:33:57", "isDeleted": "false", "sysRowVersion": "4648065589720383488", "sysRef": "-1/MakePayment-4/GTBank-581669/-4940333/Manan Suthar-", "paymentGatewayRoleFK": "", "passwordNotes": "", "customer\_SysRef": "-4940333/Manan Suthar-", "customerPK": "581669", "paymentGateway\_PaymentGatewayName": "GTBank", "paymentGatewayPK": "4", "paymentGatewayApi\_ApiName": "MakePayment", "paymentGatewayApiPK": "1", "paymentGatewayRole\_RoleName": "", "paymentGatewayRolePK": "", "rowFwd": "1", "rowBwd": "1", "maxRows": "1" } ], "newUrlPath": "", "isPopup": "False"} |

* Note: While using PaymentGatewayApiFK field value in above api params, use EntryID of table PaymentGatewayApi with PaymentGatewayApiName field value as shown below:

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| **PaymentGatewayApiName** | **Description** |
| MakePayment | Api for making payment |
| ViewBalance | Api for checking account balance |
| ViewTransactions | Api for checking account transactions |

# 2. Accounts or Credentials for Test environment

## 2.1 Nibss

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| **Account Details** |
| Debit Account Number | 0123456789 |
| Debit Bank Code | 050 |

## 2.2 Gtb

|  |
| --- |
| **Credentials** |
| customer\_Id / accesscode | 205158352 |
| username | dapoapar |
| password | abcd1234\* |

* Note: User has to add/edit credentials using the APIs listed in previous section in case API needs credentials to be posted.